ABSTRACT

A method for generating a preamble sequence for decreasing a peak-to-average power ratio (PAPR) through at least two antennas in an orthogonal frequency division

5 multiplexing (OFDM) communication system. The method comprises generating a first preamble sequence in which odd data of the preamble sequence becomes null data and even data of the preamble sequence becomes data, the first preamble sequence being adapted to be transmitted via one of the two antennas; and generating a second preamble sequence in which even data of the preamble sequence becomes null data and odd data

10 of the preamble sequence becomes data, the second preamble sequence being adapted to be transmitted via another one of the two antennas.